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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/849,198	05/19/2004	Dipl.-Ing. Karl Schrodinger	2004-51636US	6994
57299	7590	06/17/2008		
Kathy Manke			EXAMINER	
Avago Technologies Limited			BELLO, AGUSTIN	
4380 Ziegler Road			ART UNIT	
Fort Collins, CO 80525			PAPER NUMBER	
			2613	
			NOTIFICATION DATE	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/849,198

Applicant(s)

SCHRODINGER, DIPL.-ING. KARL

Examiner

Agustin Bello

Art Unit

2613

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-36, 39 and 40 is/are allowed.
- 6) ☒ Claim(s) 23-26, 37, 38 and 41-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanji (U.S. Patent No. 6,512,617).

Regarding claim 23, Tanji teaches an optical transmission element (reference numeral 25 in Figure 1); a driver (reference numeral 80 in Figure 1) comprising a driver input configured to drive the optical transmission element in response to a transmission signal applied to the driver input to produce a drive signal for the optical transmission element; a programmable control device (reference numeral 15 in Figure 1) configured to selectively drive the driver in a program mode of operation; and a multiplexing device (reference numeral 35 in Figure 1) connected between a signal input comprising an external connecting pin (reference numeral 40, 45, 50, 55 in Figure 1) of the transmission module, the driver input (reference numeral 80 in Figure 1) and the programmable control device (reference numeral 15 in Figure 1), and configured to selectively pass an input signal at the external connecting pin signal input of the transmission module to the control device in the program mode or to the driver in a transmission mode of operation (column 3 lines 55-64).

Regarding claim 24, Tanji teaches that the multiplexing device comprises a control input (reference numeral 45 in Figure 1) via which a control signal is fed into the multiplexing device

(reference numeral 35 in Figure 1), and wherein the multiplexing device is configured to switch in response to the control signal from a program mode switching state in which the signal input of the transmission module and the programmable control device are connected, to a transmission mode switching state in which the signal input of the transmission module and the driver input are connected, or vice versa (column 3 lines 55-64).

Regarding claim 25, Tanji teaches that the multiplexing device is configured to determine whether the input signal applied to the signal input of the transmission module is a programming signal for the programmable control device or a transmission signal for the driver, and wherein the multiplexing device is configured to switch the input signal automatically to the programmable control device if the input signal is a programming signal, or switch the input signal to the driver if the input signal is a transmission signal (e.g. signal 45 initiates the "Calibration mode" and therefore element 35 in Figure 1 determines whether the input signal is a programming signal or a transmission signal; see also column 3 lines 55-64).

Regarding claim 26, Tanji teaches a monitoring module (reference numeral 35 in Figure 1) comprising an input (e.g. "INTERFACE" of numeral 35 connected to reference numerals 45, 55 in Figure 1) connected directly or indirectly to the signal input of the transmission module and configured to identify programming signals and transmission signals in each case (e.g. inherent in the identification of the calibration initiate signal); and a multiplexing unit (e.g. the unit comprising both the CONTROL and STATE MACHINE of element 35 in Figure 1) coupled to and driven by the monitoring module via a control connection and comprising at least one input (reference numerals 45, 55 in Figure 1), two outputs (e.g. one output to reference numeral 15 in Figure 1; and a second output to reference numeral 75, 80 in Figure 1) and the control

connection (reference numeral 45 in Figure 1), wherein the multiplexing unit is connected directly or indirectly at the input to the signal input of the transmission module (reference numerals 45, 55 in Figure 1) and at the output to the driver input of the driver (reference numeral 80 in Figure 1) and to the programmable control device (reference numeral 15 in Figure 1), respectively, and wherein the multiplexing unit is configured to connect the signal input of the transmission module to the driver input of the driver or to the control device as a function of a control signal from the monitoring module (e.g. signal 45 initiates the "Calibration mode" and therefore element 35 in Figure 1 determines whether the input signal is a programming signal or a transmission signal; see also column 3 lines 55-64).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 37-38 and 41-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanji.

Regarding claim 37-38 and 41-44, Tanji differs from the claimed invention in that Tanji fails to specifically teach a level detector, frequency detector, or code detector which act to evaluate the input signal and determine whether the input signal is a transmission signal or a programming signal. However, one skilled in the art would clearly have recognized that any of

these differentiators and their corresponding detectors could have been used to determine whether the input signal is a transmission signal or a programming signal. Differentiation of signal according to level, frequency, or code is very well known in the art and therefore, it would have been obvious to one skilled in the art at the time the invention was made to employ any of these differentiators and their corresponding detectors in the system of Tanji.

Allowable Subject Matter

5. Claims 27-36, 39-40 are allowed.

Response to Arguments

6. Applicant's arguments filed 10/31/07 have been fully considered but they are not persuasive. The applicant argues that the amended claim distinguishes the invention from the prior art. However, the examiner maintains that the cited prior art continue to read on the claimed invention.

In response to applicant's arguments, the recitation of the optical transmission module being embodied in an integrated circuit has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Furthermore, even if the preamble of the amended claim were to be given patentable weight, the examiner contends that embodying the optical transmission module as an integrated

circuit would have been obvious to one skilled in the art. *In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Agustin Bello whose telephone number is (571) 272-3026. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Agustin Bello/
Primary Examiner, Art Unit 2613